



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

May 29, 2003

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: Glasland Industries, Inc., d/b/a Splendor Boats 085-16856-00038

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4 (d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (b) the interest of the person making the request;
- (c) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

REGIS.wpd 8/21/02



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May 29, 2003

Mr. Doyle Heckaman
Glasland Industries, Inc., d/b/a Splendor Boats
4664 West 950 South
Silverlake, Indiana 46982

Re: Registered Operation Status,
085-16856-00038

Dear Mr. Heckaman:

The application from Glasland Industries, Inc., d/b/a Splendor Boats, received on February 28, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following fiberglass products manufacturing source, located at 9526 South State Road 15, Silverlake, Indiana, is classified as registered:

- (a) One (1) chop application unit, identified as SV Chop 1, installed in 1977, exhausting to Stack SV Chop 1, equipped with dry particulate filters, using flow coat application, capacity: 0.15 roof vents per hour.
- (b) One (1) chop application unit, identified as SV Chop 2, installed in 1977, exhausting to Stack SV Chop 2, equipped with dry particulate filters, using flow coat application, capacity: 0.125 boats per hour.
- (c) One (1) chop application unit, identified as SV Chop 3, installed in 1977, exhausting to Stack SV Chop 3, equipped with dry particulate filters, using flow coat application, capacity: 1.25 fan shrouds per hour.
- (d) One (1) chop application unit, identified as SV Chop 4 Robotics, installed in 1977, exhausting to Stack SV Chop 4 Robotics, equipped with dry particulate filters, using robotic airless spray equipment, capacity: 1.25 fan shrouds per hour.
- (e) One (1) gelcoat application unit, identified as SV Gel 1, installed in 1977, exhausting to Stack SV Gel 1, equipped with dry particulate filters, using two (2) gelcoat guns, capacity: 0.15 roof vents per hour or 0.0125 boats per hour.
- (f) One (1) gelcoat application unit, identified as SV Gel 2 Robotics, installed in 1977, exhausting to Stack SV Gel 2 Robotics, equipped with dry particulate filters, using one (1) gelcoat gun, capacity: 1.25 fan shrouds per hour.
- (g) Twelve (12) radiant heaters, firing natural gas, rated at 0.1 million British thermal units per hour, each.
- (h) One (1) gas heater, firing natural gas, rated at 4.8 million British thermal units per hour.
- (i) One (1) wood shop, equipped with a 12" band saw and a 10" table saw, uncontrolled and exhausted internally.

- (j) Four (4) grinding operations:
- (1) One grinding operation, identified as SV Grind Boats and Small Parts, exhausting to Stack SV Grind Boats and Small Parts, equipped with a dry particulate filter.
 - (2) One grinding operation, identified as SV Grind-1 Fan Shrouds, exhausting to Stack SV Grind-1 Fan Shrouds, equipped with a dry particulate filter.
 - (3) One grinding operation, identified as SV Grind-2 Fan Shrouds, exhausting to Stack SV Grind-2 Fan Shrouds, equipped with a dry particulate filter.
 - (4) A drill press and hand held tools.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
2. Any change or modification which may increase the potential to emit of total HAPs, VOC, PM or PM₁₀ to twenty five (25) tons per year, or a single HAP to ten (10) tons per year from this source shall require approval from IDEM, OAQ prior to making the change.
3. Pursuant to 326 IAC 6-3-2(d)(1), the chop application units (SV Chop 1, SV Chop 2, SV Chop 3 and SV Chop 4 Robotics) and the gelcoat application units (SV Gel 1 and SV Gel 2 Robotics) shall be controlled by a dry particulate filter, waterwash or an equivalent control device, except when using flow coat application, and the control device shall be operated in accordance with manufacturer's specifications.
4. Pursuant to 326 IAC 6-3-2(d)(2), if overspray from the chop application units (SV Chop 1, SV Chop 2, SV Chop 3 and SV Chop 4 Robotics) and/or the gelcoat application units (SV Gel 1 and SV Gel 2 Robotics) is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

This registration is a revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Branch
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

EAL/MES

cc: File - Kosciusko County
Kosciusko County Health Department
Air Compliance - Doyle Houser
Northern Regional Office
Permit Filing
Air Programs Section- Michele Boner
Compliance Branch - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Glasland Industries, Inc., d/b/a Splendor Boats
Address:	9526 South State Road 15
City:	Silverlake
Authorized individual:	Doyle Heckaman
Phone #:	(260) 352 - 2835
Registration #:	085-16856-00038

I hereby certify that Glasland Industries, Inc., d/b/a Splendor Boats is still in operation and is in compliance with the requirements of Registration **085-16856-00038**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Glasland Industries, Inc., d/b/a Splendor Boats
Source Location:	9526 South State Road 15, Silverlake, Indiana 46982
County:	Kosciusko
SIC Code:	3089
Operation Permit No.:	R 085-16856-00038
Permit Reviewer:	Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed an application from Glasland Industries, Inc., d/b/a Splendor Boats relating to the operation of a fiberglass products manufacturing source.

History

Glasland Industries was issued a registration (CP 085-2855-00038) on April 29, 1993. Splendor Boats, formerly under different ownership, had been operating at exempt levels. This registration application seeks to combine both operations into one company, with one owner/operator. The new name of the company is Glasland Industries, Inc. d/b/a Splendor Boats. Therefore, all of the equipment listed under the Permitted Emission Units heading were either permitted by the 1993 registration, or were previously exempt.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted (or previously exempt) emission units and pollution control devices:

- (a) One (1) chop application unit, identified as SV Chop 1, installed in 1977, exhausting to Stack SV Chop 1, equipped with dry particulate filters, using flow coat application, capacity: 0.15 roof vents per hour.
- (b) One (1) chop application unit, identified as SV Chop 2, installed in 1977, exhausting to Stack SV Chop 2, equipped with dry particulate filters, using flow coat application, capacity: 0.125 boats per hour.
- (c) One (1) chop application unit, identified as SV Chop 3, installed in 1977, exhausting to Stack SV Chop 3, equipped with dry particulate filters, using flow coat application, capacity: 1.25 fan shrouds per hour.
- (d) One (1) chop application unit, identified as SV Chop 4 Robotics, installed in 1977, exhausting to Stack SV Chop 4 Robotics, equipped with dry particulate filters, using robotic airless spray equipment, capacity: 1.25 fan shrouds per hour.

- (e) One (1) gelcoat application unit, identified as SV Gel 1, installed in 1977, exhausting to Stack SV Gel 1, equipped with dry particulate filters, using two (2) gelcoat guns, capacity: 0.15 roof vents per hour or 0.0125 boats per hour.
- (f) One (1) gelcoat application unit, identified as SV Gel 2 Robotics, installed in 1977, exhausting to Stack SV Gel 2 Robotics, equipped with dry particulate filters, using one (1) gelcoat gun, capacity: 1.25 fan shrouds per hour.
- (g) Twelve (12) radiant heaters, firing natural gas, rated at 0.1 million British thermal units per hour, each.
- (h) One (1) heater, firing natural gas, rated at 4.8 million British thermal units per hour.
- (i) One (1) wood shop, equipped with a 12" band saw and a 10" table saw, uncontrolled and exhausted internally.
- (j) Four (4) grinding operations:
 - (1) One grinding operation, identified as SV Grind Boats and Small Parts, exhausting to Stack SV Grind Boats and Small Parts, equipped with a dry particulate filter.
 - (2) One grinding operation, identified as SV Grind-1 Fan Shrouds, exhausting to Stack SV Grind-1 Fan Shrouds, equipped with a dry particulate filter.
 - (3) One grinding operation, identified as SV Grind-2 Fan Shrouds, exhausting to Stack SV Grind-2 Fan Shrouds, equipped with a dry particulate filter.
 - (4) A drill press and hand held tools.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

There are no new facilities/units requiring approval during this review.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

CP 085-2855-00038, issued on April 29, 1993.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 28, 2003, with additional information received on April 25, 2003.

Emission Calculations

See pages 1 through 3 of 3 of Appendix A of this document for detailed emissions calculations. Negligible PM emissions are expected from the wood shop and grinding operations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	6.07
PM ₁₀	6.22
SO ₂	0.016
VOC	11.1
CO	2.21
NO _x	2.63

HAPs	Potential To Emit (tons/year)
Styrene	8.56
Methyl Methacrylate	1.26
MEK	1.23
Benzene	0.0001
Dichlorobenzene	0.00001
Formaldehyde	0.002
Hexane	0.047

Toluene	0.0001
Lead Compounds	0.00001
Cadmium Compounds	0.00001
Chromium Compounds	0.00001
Manganese Compounds	0.00001
Nickel Compounds	0.0001
TOTAL	11.1

- (a) The potential to emit (as defined in 326 IAC 2-5.1-2) of VOC is less than twenty-five (25) tons per year and greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of combination HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Kosciusko County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Kosciusko County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	6.07
PM ₁₀	6.22
SO ₂	0.016
VOC	11.1
CO	2.21
NO _x	2.63

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of two hundred-fifty (250) tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the registration application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.
- (c) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Reinforced Plastic Composites Production, 40 CFR Part 63, Subpart WWWW, because this source is not a major source of HAPs.

State Rule Applicability - Entire Source

326 IAC 2-4.1 (New Source Toxics Control)

The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of combination HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

This source is located in Kosciusko County and the potential to emit of CO, VOC, PM₁₀, SO₂ and NO_x are each less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate emission limitations, work practices, and control technologies)

- (a) Pursuant to 326 IAC 6-3-2(d)(1), the chop application units (SV Chop 1, SV Chop 2, SV Chop 3 and SV Chop 4 Robotics) and the gelcoat application units (SV Gel 1 and SV Gel 2 Robotics) shall be controlled by a dry particulate filter, waterwash or an equivalent control device, except when using flow coat application, and the control device shall be operated in accordance with manufacturer's specifications.

Pursuant to 326 IAC 6-3-2(d)(2), if overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

- (1) Repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

- (b) Pursuant to 326 IAC 6-3-1(b)(14), the one (1) wood shop and four (4) grinding operations

are exempt from the requirements of 326 IAC 6-3-2, because they emit negligible amounts of particulate.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

326 IAC 8-1-6 is not applicable to this source because this source has a VOC potential to emit less than twenty-five (25) tons per year.

326 IAC 20-25 (Emissions from Reinforced Plastics Composites Fabricating Emission Units)

326 IAC 20-25 is not applicable to this source because this source does not have the potential to emit ten (10) tons per year of any hazardous air pollutant (HAP) or twenty-five (25) tons per year of any combination of HAPs.

Conclusion

The operation of this fiberglass products manufacturing source shall be subject to the conditions of the attached proposed Registration **085-16856-00038**.

Reinforced Plastics and Composites

Company Name: Glasland Industries, Inc., d/b/a Splendor Boats
Address City IN Zip: 9526 South State Road 15, Silverlake, Indiana 46982
Registration: 085-16856
Plt ID: 085-00038
Reviewer: Edward A. Longenberger/MES
Date: February 28, 2003

Material (Application Method)	Density (lb/gal)	Weight % Monomer VOC/HAP	CFA Unified Emission Factor (lbs/ton)	Gallons per unit	Units per hour	Pounds VOC/HAP per hour	Pounds VOC/HAP per day	Tons of VOC/HAP per year	PM tons per year	Transfer Efficiency
Boat Resin										
(Mechanical Non-Atomized)										
Styrene	9.01	31.4%	67.20	55.00	0.0125	0.21	4.99	0.912	0.00	100.00%
Boat Gelcoat										
(Air Assisted Airless)										
Styrene	10.85	29.8%	265.41	11.3600	0.0125	0.20	4.91	0.896	1.18	75.00%
Methyl Methacrylate	10.85	4.0%	60.00	11.3600	0.0125	0.05	1.11	0.202	1.62	75.00%
Boat Catalyst										
MEK	8.00	76.0%	0.00	0.51	0.0125	0.04	0.92	0.169	0.00	97.00%
Fan Shroud Resin										
(Mechanical Atomized Controlled Spray)										
Styrene	9.01	31.4%	81.64	1.44	1.25	0.66	15.89	2.90	1.46	97.00%
Fan Shroud Gelcoat										
(Gelcoat Controlled Spray)										
Styrene	10.78	30.5%	198.36	0.5000	1.25	0.67	16.04	2.93	0.62	97.00%
Methyl Methacrylate	10.78	4.0%	60.00	0.5000	1.25	0.20	4.85	0.885	0.85	97.00%
Fan Shroud Catalyst										
MEK	8.00	76.0%	0.00	0.028	1.25	0.21	5.02	0.915	0.01	97.00%
Roof Vent Resin										
(Mechanical Non-Atomized)										
Styrene	9.01	31.4%	67.20	1.83	0.15	0.08	1.99	0.364	0.00	100.00%
Roof Vent Gelcoat										
(Gelcoat Controlled Spray)										
Styrene	10.78	30.5%	198.36	0.8000	0.15	0.13	3.08	0.562	0.12	97.00%
Methyl Methacrylate	10.78	4.0%	60.00	0.8000	0.15	0.04	0.93	0.170	0.16	97.00%
Roof Vent Catalyst										
MEK	8.00	76.0%	0.00	0.037	0.15	0.03	0.81	0.148	0.00	97.00%
						VOC Control	0%			
						PM Control	98.0%			
						Potential Before Controls	2.52	60.5	11.0	6.02
						Potential After Controls	2.52	60.5	11.0	0.120

Note: Because All VOCs are HAPs, VOC and HAPs calculations are combined into one spreadsheet

METHODOLOGY

Potential VOC Pounds per Hour = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Emission factor (lb/ton) * (1 ton/2000 lbs)

Potential VOC Pounds per Day = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (24 hrs / 1 day) * Emission factor (lb/ton) * (1 ton/2000 lbs)

Potential VOC Tons per Year = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (8760 hr/yr) * (1 ton / 2000 lbs) * Emission factor (lb/ton) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (8760 hr/yr) * (1 ton / 2000 lbs)

Total = Sum of all worst case coatings and solvents used

Emission Factor (lbs VOC/ton) taken from "Unified Emission Factors for Open Molding of Composites", Composite Fabricators Association (CFA), April 1999

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Page 2 of 3 TSD App A

**Company Name: Glasland Industries, Inc., d/b/a Splendor Boats
Address City IN Zip: 9526 South State Road 15, Silverlake, Indiana 46982
Registration: 085-16856
Plt ID: 085-00038
Reviewer: Edward A. Longenberger/MES
Date: February 28, 2003**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

6.0000

52.56

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.050	0.200	0.016	2.63	0.145	2.21

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 3 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions**

Page 3 of 3 TSD App A

**Company Name: Glasland Industries, Inc., d/b/a Splendor Boats
Address City IN Zip: 9526 South State Road 15, Silverlake, Indiana 46982
Registration: 085-16856
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HAPs - Organics

Emission Factor in lb/MMcf	Benzene 0.0021	Dichlorobenzene 0.0012	Formaldehyde 0.0750	Hexane 1.8000	Toluene 0.0034
Potential Emission in tons/yr	0.0001	0.0000	0.0020	0.0473	0.0001

HAPs - Metals

Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.00038	Nickel 0.0021	Total HAPs
Potential Emission in tons/yr	0.0000	0.0000	0.0000	0.0000	0.0001	0.050

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.